DATA PATH FOR HIGH PERFORMANCE PATTERN GENERATOR

ABSTRACT OF THE DISCLOSURE

A method and system for a high-speed datapath for a high-performance pattern generator such as an analog SLM for generating the image is disclosed. The data path has provisions for completely independent parallel data flows giving true scalability to arbitrarily high throughput. In an exemplary embodiment areas on the SLM are assigned to specific rasterizing and fracturing processors. There is an overlap between fields for blending of the edges in the pattern and for computation of interaction between features in the pattern. The datapath has data integrity checks and a recovery mode when an error condition is raised, allowing it to recover from most errors without creating new errors.